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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/361,829	07/27/1999	ELLEN M. HEATH	1074.003US1	6019

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EXAMINER

ALLEN, MARIANNE P

ART UNIT	PAPER NUMBER
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1631

DATE MAILED: 05/16/2002

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/361,829

Applicant(s)

HEATH ET AL.

Examiner

Marianne Allen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Prosecution Application

The request filed on 3/11/02 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/361,829 is acceptable and a CPA has been established. An action on the CPA follows.

Response to Arguments

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

Claims 20-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

Claim Rejections - 35 USC § 112

Claims 1-5, 7, 9-13 and 15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

Independent claims 1 and 9 and claims 7 and 15 have been amended to recite "at a selectable rate from gentle to vigorous." Basis is stated to be on page 6, lines 27-29. However, this language is with respect to mixing a sample and not to aspirating (or removing) a volume

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from the sample. See second full paragraph on page 6. As such, the specification as originally filed does not support the concept now claimed.

Claim Rejections - 35 USC § 102

Claims 6, 8, 14 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Petschek et al. (U.S. Patent No. 5,389,339).

Petschek et al. discloses a fully automated DNA separation procedure and device therefore. The computer system contains a plurality of sub-modules and a means for communicating the commands to the device. The user can input process variables. There is a graphical user interface to display status messages. See at least abstract; claims; figures and descriptions thereof; column 6, lines 13-22; and column 10, lines 17-39.

Claim Rejections - 35 USC § 103

Claims 1-9, 10, 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petschek et al. (U.S. Patent No. 5,389,339) in view of Lange (U.S. Patent No. 6,232,464).

Petschek et al. is applied as above and further teaches using a spin centrifuge with variable speed and time; pipetting to mix at variable rates and numbers of time; pipetting to dispense or withdraw fluid at variable rates and volumes. (See in particular Figure 3A.)

Petschek et al. does not disclose controlling the temperature of a function.

Lange et al. discloses an automated apparatus for isolating nucleic acids from a biological sample. The samples can be heated and cooled during various steps of the process, including lysing. See at least abstract, claims, figures, and columns 5-7 and 9-10.

It would have been obvious to those of ordinary skill in the art to add a module for temperature control to the apparatus and computer system of Petschek et al. as taught by Lange

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et al. in the lysis step. One would have been motivated to do so for the advantages taught by Lange. Such temperature control was routinely performed by those of ordinary skill in the art at the time of the invention. (See also Uhlen et al., U.S. Patent No. 5,330,914, at least Figure 1 and column 2, lines 53-57.)

Claims 9, 11,¹⁴ and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petschek et al. (U.S. Patent No. 5,389,339) in view of Lange (U.S. Patent No. 6,232,464) and further in view of Johnson et al. (U.S. Patent No. 5,584,039).

Petschek et al. and Lange are applied as above. They do not require use of a dedicated processor.

Johnson et al. is applied as in prior Office actions and discloses the well-known advantages of using dedicated processors in computer systems wherein a processor is responsible for the control of multiple submodules and tasks as a means of more effectively distributing the work in a computer environment. (See Summary of the Invention.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a dedicated processor in the apparatus and computer system suggested by Petschek et al. and Lange as set forth above for the advantages taught by Johnson et al.

Claims 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petschek et al. (U.S. Patent No. 5,389,339) in view of Lange (U.S. Patent No. 6,232,464) and further in view of Poulter et al. (U.S. Patent No. 6,072,795).

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Petschek et al. and Lange are applied as above. They do not require use of hard code burned into the processor.

Poulter et al. is applied as in prior Office actions and discloses the use of computer systems with programs wherein said programs are burned into the processor with hard code for the advantages of reducing software programming and less software support. (See column 6, lines 8-19.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize computer systems with the programs burned into the processor with hard code in the apparatus and computer system suggested by Petschek et al. and Lange as set forth above for the advantages taught by Poulter et al.

Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petschek et al. (U.S. Patent No. 5,389,339) in view of Lange (U.S. Patent No. 6,232,464) and further in view of McNutt (U.S. Patent No. 5,802,389).

Petschek et al. and Lange are applied as above. They do not require use of a programmable logic controller.

McNutt is applied as in prior Office actions and discloses the importance of providing programmable logic controllers (PLCs) which provide modular approaches. Modular systems allow for adaptation to simple and complex situations.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a PLC with the apparatus and computer system suggested by Petschek et al. and Lange as set forth above for the advantages taught by McNutt.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Marziali et al. (U.S. Patent No. 6,273,848) discloses a method for using a flow-through microcentrifuge for isolating nucleic acids in a fully automated fashion. See at least abstract and claims.

MacConnell (U.S. Patent No. 5,217,593) discloses a nucleic acid purification system and method. The patent discloses a fully automated machine that would have been commercially available that uses a centrifuge and robotics to isolate plasmid DNA. See at least column 2, lines 9-25.

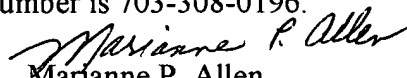
Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne P. Allen whose telephone number is 703-308-0666. The examiner can normally be reached on Monday-Friday, 7:00 am - 1:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 703-308-4028. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.


Marianne P. Allen
Primary Examiner
Art Unit 1631

mpa
May 8, 2002